

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for generating a virtual anatomic environment for use in a computer based visual simulation of minimally invasive surgery, comprising the steps of:

providing a main virtual anatomic environment,

selecting a local anatomic environment from a predefined library comprising a set of two or more local anatomic environments, all of the local anatomic environments of the library being separately ~~modeled~~modelled three-dimensional models each representing an individual anatomic variation in a local internal area of a living being,
~~the local anatomic environments modeled to represent anatomic variations occurring in living beings, and~~

including the selected local anatomic environment in said main virtual anatomic environment to form said virtual anatomic environment, the selection of different combinations of selected local anatomic environments in said main virtual anatomic environment thereby allowing generation of different virtual environments, each different virtual environment representing anatomic variations occurring in living beings.

2. (Cancelled)

3. (Previously Presented) A method according to claim 1, wherein the step of selecting a local anatomic environment from a predefined library comprising two or more of local anatomic environments further comprises the step of randomly selecting one of the local anatomic environments in the library.

4. (Previously Presented) A method according to claim 3, wherein the probability of randomly selecting a certain local anatomic environment essentially corresponds with the degree of occurrence of that local anatomic environment in living beings.

5. (Previously Presented) A method according to claim 1, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity.

6. (Previously Presented) A method according to claim 1, further comprising the step of selecting, by user selection, a certain one of said local anatomic environments from said library and including it into said virtual anatomic environment.

7. (Currently Amended) A device for generating a virtual anatomic environment for use in a computer based visual simulation of minimally invasive surgery, comprising:

a ~~modeling~~modelling device for providing a main virtual anatomic environment,
a library, comprising a set of two or more local anatomic environments, all of
the local anatomic environments of the library being separately ~~modeled~~modelled
three-dimensional models each representing an individual anatomic variation in a
local internal area of a living being, ~~the local anatomic environments modeled to~~
~~represent anatomic variations occurring in living beings, and~~

means for incorporating one of the local anatomic environments of the library
into the main virtual anatomic environment, together forming said virtual anatomic
environment,

thereby allowing generation of different virtual environments, each different
virtual environment representing anatomic variations occurring in living beings.

8. (Previously Presented) A device according to claim 7, further
comprising a selection device for selecting one of said local anatomic environments
from said library to be included in said virtual anatomic environment.

9. (Previously Presented) A device according to claim 8, wherein the
selection device is arranged to randomly select one of said local anatomic
environments from said library to be included in said virtual anatomic environment.

10. (Previously Presented) A device according to claim 9, wherein the
selection device is arranged to randomly select one of said local anatomic
environments in such a way that the probability of selecting a certain local anatomic

environment essentially corresponds with the degree of occurrence of that local anatomic environment in human beings.

11. (Previously Presented) A device according to claim 7, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity.

12. (Previously Presented) A computer-based minimal-invasive surgery simulation system, comprising a device for generating a virtual anatomic environment as described in claim 7.

13. (Previously Presented) A method according to claim 1, wherein the step of selecting a local anatomic environment from a predefined library comprising two or more of simulated local anatomic environments further comprises the step of randomly selecting one of the local anatomic environments in the library.

14. (Previously Presented) A method according to claim 1, further comprising the step of selecting, by user selection, a certain one of said local anatomic environments from said library and including it into said virtual anatomic environment.

15. (Previously Presented) A method according to claim 5, further comprising the step of selecting, by user selection, a certain one of said local anatomic environments from said library and including it into said virtual anatomic environment.

16. (Previously Presented) A device according to claim 8, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity.

17. (Previously Presented) A device according to claim 9, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity.

18. (Previously Presented) A device according to claim 10, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity.

19. (Previously Presented) A computer-based minimal-invasive surgery simulation system, comprising a device for generating a virtual anatomic environment as described in claim 8.

20. (Previously Presented) A computer-based minimal-invasive surgery simulation system, comprising a device for generating a virtual anatomic environment as described in claim 9.

21. (Previously Presented) A method according to claim 1, wherein components included in the local anatomic environment are excluded in the main virtual anatomic environment.

22. (Previously Presented) A device according to claim 7, wherein components included in the local anatomic environments are excluded in the main virtual anatomic environment.

<End of Claims Listing>